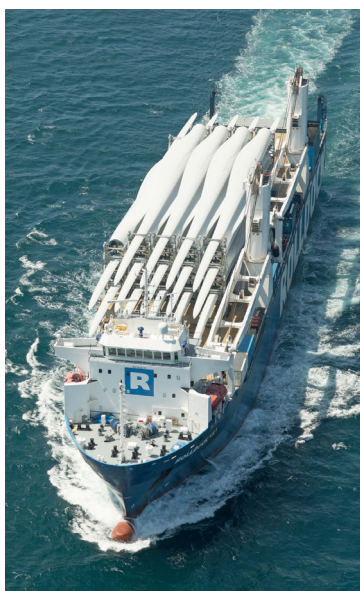


R ROLL GROUP **DETACHABLE BASE**

www.roll-group.com



MOVING ENERGY

Roll Group supports the renewable market by offering a factory to foundation transport solution to the wind energy industry both on land and at sea. Our modern and varied asset base ensures that our engineers receive practical feedback on a daily basis.

COMBINED EXPERTISE

By understanding the challenges of both land and sea transportation in combination with close monitoring of the developments within our industry, we quickly identify contemporary challenges and offer effective solutions at short notice. Our customers are served by a single project management team which is supported by our Roll Group SHEQ department to ensure an optimal understanding of all safety matters. We are happy to share our experience to ensure a more efficient logistical chain and subsequently a more sustainable environment. Together We Know How!

OUR EXPERIENCE AT SEA

In 2017 our RollDock Sea shipped 66 transition pieces (TPs) from Aviles (Spain) to Eemshaven (The Netherlands) in less than eleven months. The TPs are part of a large German wind farm. The structures, realized by the Daniel Alonso group and manufactured in the workshops of Idesa and Windar Renewables, were completed for immediate installation. The TPs serve as a connection between the wind turbine tower and the monopile which stands on the sea bed.

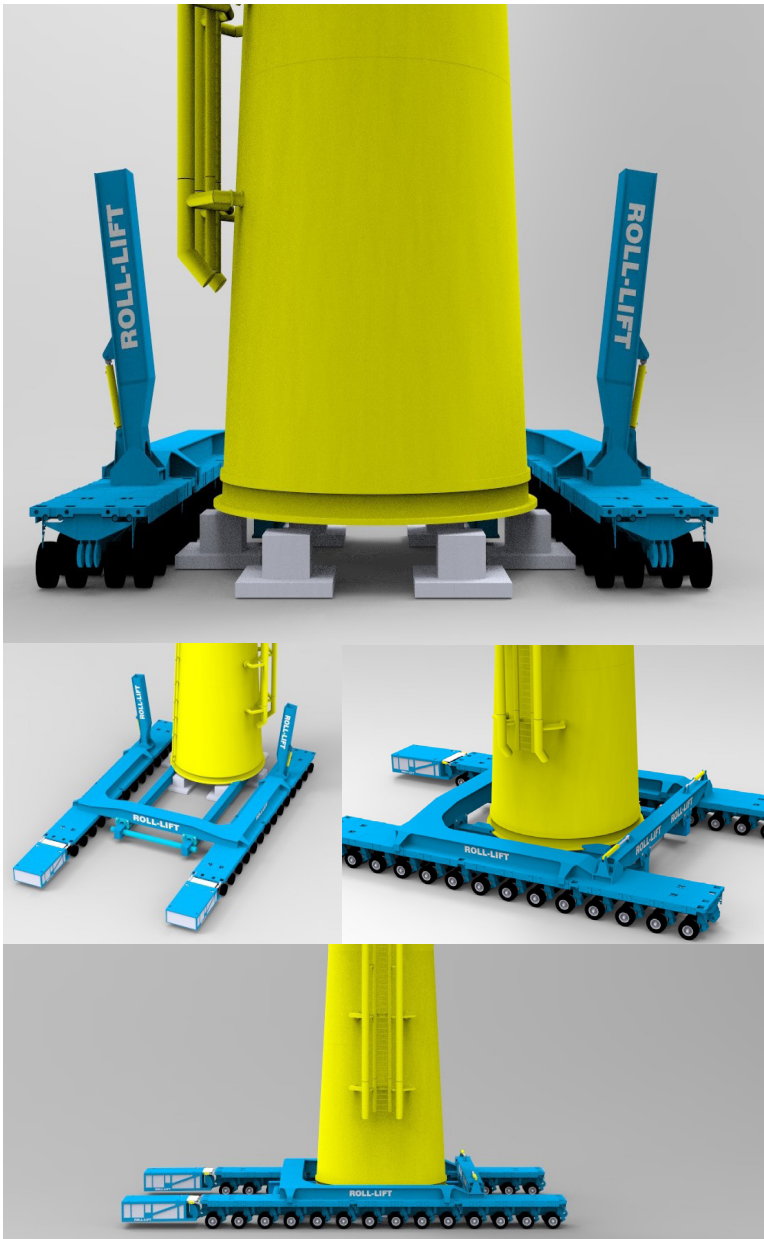
Roll Group was asked by Coordinadora Internacional de Cargas, responsible for the logistical part of the project, to take care of the sea transport of the transition pieces. The project, called Merkur project, was challenging as the components were pushing the envelope - the cargo weight, the lifting capacity of the crane and the available dock space. In order to transport the cargo in a safe way, conventional sea fastening methods were not suitable. A custom-made grillage design was therefore devised by Coordinadora Internacional de Cargas in collaboration with the RollDock team.

The Merkur wind farm is expected to be operative by the end of 2019 and will generate enough power to supply energy to 500,000 households per year.



OUR EXPERIENCE ON LAND

With our presence on both land and sea we are often engaged by offshore windfarm stakeholders to improve the logistical process, reduce costs and to decrease any risks. In close collaboration with manufacturers and marshalling ports, Roll Group has developed a **DETACHABLE BASE FRAME** for the transport of transition pieces with using our SPMT's.



HOW IT WORKS

The transport frame is a smart design which allows the work to be carried out at ground level and avoids the need for heavy crawler cranes.

The lower suspended girders are adjustable to adapt to the desired dimensions depending on the TP diameter or support positions. The 'gate' is controlled by hydraulic cylinders driven by the powerpack connected to the SPMT.

Our first system is designed for a transition piece of maximum 600 ton in weight and will be operated by 28 axle lines of SPMT - maneuvering on a footprint of approximately 20x15m.

OUR TP HANDLER USP

- 1 Detachable base frame allowing the SPMT's to be deployed for other activities
- 2 Minimal impact on storage area with vertical 'gate'
- 3 Adjustable suspended girders to adapt to your needs.

ACHIEVE THE BEST BY EARLY INVOLVEMENT

Combining the specific needs of clients with our industry leading experience at the early stages of a project, enables us to find the most efficient, cost-effective and practical solutions together.

Our engineers collaborate with our clients to develop ideas into workable concepts, analyze critical paths, advise and assist up to the detail design phase.

ROLL GROUP DEVELOPMENTS

Acting on the demand from the market we are currently working on a light version (up to 350t) of our TP handler. Follow us on LinkedIn or visit our web-site to avoid missing our updates!

If you would like more information or to discuss with one of our engineers, please contact us.

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